

#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5 77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590

# AUG 2 4 2016

REPLY TO THE ATTENTION OF

# CERTIFIED MAIL RETURN RECEIPT REQUESTED

Gary Williams
Plant Manager
Solutia, Inc.
5100 West Jefferson Avenue
Trenton, Michigan 48183

Re:

Finding of Violation

Solutia, Inc.

Trenton, Michigan

Dear Mr. Williams:

The U.S. Environmental Protection Agency is issuing the enclosed Finding of Violation (FOV) to Solutia, Inc. (you) under Section 113(a)(3) of the Clean Air Act (CAA), 42 U.S.C. § 7413(a)(3). We find that you are violating Title V of the CAA, 42 U.S.C. § 7661 et seq., Section 112 of the CAA, 42 U.S.C. § 7412, and the implementing regulations at 40 C.F.R. Part 63, Subpart FFFF, the National Emission Standards for Hazardous Air Pollutants for Miscellaneous Organic Chemical Manufacturing, at your Trenton, Michigan facility.

Section 113 of the CAA gives us several enforcement options. These options include issuing an administrative compliance order, issuing an administrative penalty order, and bringing a judicial civil or criminal action.

We are offering you an opportunity to confer with us about the violations alleged in the FOV. The conference will give you an opportunity to present information on the specific findings of violation, any efforts you have taken to comply, and the steps you will take to prevent future violations. In addition, in order to make the conference more productive, we encourage you to submit to us information responsive to the FOV prior to the conference date.

Please plan for your facility's technical and management personnel to attend the conference to discuss compliance measures and commitments. You may have an attorney represent you at this conference.

The EPA contact in this matter is Albana Bega. You may call her at (312) 353-4789 to request a conference. You should make the request within 10 calendar days following receipt of this letter. We should hold any conference within 30 calendar days following receipt of this letter.

Sincerely,

Edward Nam

Acting Director

Air and Radiation Division

Enclosure

cc: Chris Ethridge, MDEQ

Tom Hess, MDEQ

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 5

IN THE MATTER OF:	)	
Solutia, Inc.	.)	FINDING OF VOILATION
Trenton, Michigan	,	THE DISCOUNT OF THE PROPERTY O
	)	
Proceedings Pursuant to	)	EPA-5-16-MI-16
Section 113(a)(1) and (3) of the	)	
Clean Air Act, 42 U.S.C.	)	
§ 7413(a)(1) and (3)	)	

#### FINDING OF VIOLATION

The U.S. Environmental Protection Agency is issuing this Finding of Violation (FOV) to Solutia, Inc. (Solutia) for violations of Title V of the Clean Air Act (CAA), 42 U.S.C. § 7661 et seq.; Section 112 of the CAA, 42 U.S.C. § 7412; and the implementing regulations at 40 C.F.R. Part 63, Subpart FFFF, the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Miscellaneous Organic Chemical Manufacturing (the MON) at its Trenton, Michigan facility.

This FOV is issued pursuant to Section 113(a)(3) of the CAA, 42 U.S.C. § 7413(a)(3). The authority to issue this FOV has been delegated to the Director, Air and Radiation Division, Region 5.

#### Statutory and Regulatory Background

#### Title V

- 1. Title V of the CAA, 42 U.S.C. §§ 7661-7661f, and its implementing regulations at 40 C.F.R. Part 70, establish an operating permit program for certain sources, including major sources, and other sources made subject under Section 502(a) of the CAA, 42 U.S.C. § 7661a(a).
- 2. For the purposes of Title V, Section 501(2)(B) of the CAA, 42 U.S.C. § 7661(2)(B), and 40 C.F.R. § 70.2 define "major source" as, among other things, any stationary source that directly emits or has the potential to emit-100 tons per year (tpy) or more of any air pollutant.
- Pursuant to Section 502(b) of the CAA, 42 U.S.C. § 7661a(b), EPA promulgated regulations establishing the minimum elements of a Title V permit program to be administered by any air pollution control agency. 57 Fed. Reg. 32295 (July 21, 1992). These regulations are codified at 40 C.F.R. Part 70.
- 4. On January 10, 1997, EPA granted interim approval of Michigan's Title V permit program. 62 Fed. Reg. 1387 (effective February 10, 1997). On December 4, 2001, EPA fully approved the Michigan Title V permit program. 66 Fed. Reg. 62949 (effective November 30, 2001).

- 5. Section 502(a) of the CAA, 42 U.S.C. § 7661a(a), and EPA's implementing regulations at 40 C.F.R. § 70.7(b) have at all relevant times made it unlawful for any person to violate any requirement of a permit issued under Title V.
- 6. The Michigan Department of Environmental Quality (MDEQ) issued Renewable Operating Permit No. MI-ROP-B2155-2009a (Title V Permit) to Solutia, effective August 12, 2009.
- 7. Special Condition I.1 of the Source-Wide Conditions of Solutia's Title V Permit limit individual hazardous air pollutant (HAP) emissions from the facility to less than 9.0 tpy on a 12-month rolling time period, as determined at the end of each calendar month.
- 8. Special Condition VI.1 of the Source-Wide Conditions of Solutia's Title V Permit requires that Solutia keep records of monthly and 12-month rolling time period calculations of individual and total HAP emissions from all equipment.
- 9. Special Condition VI.3 of the Source-Wide Conditions of Solutia's Title V Permit requires that Solutia implement a leak detection and repair monitoring program for monitoring fugitive HAP emissions on the in-HAP service equipment, and monitor in-HAP service equipment at least semi-annually.

# The MON

- 10. Section 112(d) of the CAA, 42 U.S.C. § 7412(d), authorizes EPA to promulgate regulations for particular industrial sources that emit one or more of the HAPs listed in Section 112(b) of the CAA, 42 U.S.C. § 7412(b), in significant quantities.
- 11. Pursuant to Section 112(d) of the CAA, 42 U.S.C. § 7412(d), EPA promulgated the MON on November 10, 2003. 68 Fed. Reg. 63888 (November 10, 2003). The MON establishes emission standards, requirements to demonstrate initial and continuous compliance with emission limits, operating limits, work practice standards, and recordkeeping requirements associated with miscellaneous organic chemical manufacturing. The owner or operator of a new affected source with a startup date after November 10, 2003, must comply with the provisions of this subpart upon startup of the source, as required under 40 C.F.R. § 63.2445(a)(2).
- The MON, at 40 C.F.R. § 63.2440, applies to each miscellaneous organic chemical manufacturing affected source, which is the facility-wide collection of miscellaneous organic chemical manufacturing process units (MCPUs) and heat exchange systems, wastewater, and waste management units that are associated with manufacturing materials described in 40 C.F.R. § 63.2435(b)(1).
- 13. The MON, at 40 C.F.R. § 63.2435(a), applies to owners or operators of MPCUs that are located at, or are part of, a major source of HAP emissions as defined in Section 112(a) of the CAA, 42 U.S.C. § 7412(a).

- 14. Section 112(a)(1) of the CAA, 42 U.S.C. § 7412(a)(1), defines "major source," in relevant part, as any stationary source that emits or has the potential to emit considering controls, in the aggregate, 10 tpy or more of any HAP.
- 15. The MON, at 40 C.F.R. § 63.2435(b), states that an MCPU includes equipment necessary to operate a miscellaneous organic chemical manufacturing process, as defined in § 63.2550, that satisfies all of the conditions specified in paragraphs (b)(1) through (3) of this section. An MCPU also includes any assigned storage tanks and transfer racks; equipment in open systems that is used to convey or store water having the same concentration and flow characteristics as wastewater; and components such as pumps, compressors, agitators, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, and instrumentation systems that are used to manufacture any material or family of materials described in paragraphs (b)(1)(i) through (v) of this section.
- 16. The MON, at 40 C.F.R. § 63.2550, defines "miscellaneous organic chemical manufacturing process" as "all equipment which collectively function to produce a product or isolated intermediate that are materials described in § 63.2435(b)". Processes include any, all, or a combination of reaction, recovery, separation, purification, or other activity, operation, manufacture, or treatment which are used to produce a product or isolated intermediate.
- 17. Section 112(i)(3) of the CAA, 42 U.S.C. § 7412(i)(3), and 40 C.F.R. § 63.4 prohibit the owner or operator of any source from operating such source in violation of any NESHAP applicable to such source.

# Factual Background

- 18. Solutia owns and operates a resin production facility at 5100 West Jefferson Avenue, Trenton, Michigan.
- 19. The facility includes a "miscellaneous organic chemical manufacturing process" with "MCPUs," as those terms are defined in the MON, at 40 C.F.R. §§ 63.2550 and 63.2435(b), respectively.
- 20. The facility has the potential to emit over 100 tpy of volatile organic compounds, making it a "major source," as that term is defined at Section 502(2)(B) of the CAA, 42 U.S.C. § 7661(2)(B), and 40 C.F.R. § 70.2, for purposes of Title V.
- 21. Solutia processes and emits vinyl acetate, a HAP listed in Section 112(b) of the CAA, 42 U.S.C. § 7412(b), at the facility.
- 22. On August 31, 2015, Solutia submitted to MDEQ data for vinyl acetate process emissions from the facility from July 2013 through July 2015 on a monthly and 12-month rolling basis, as shown, in part, in the table below.

- 23. In a February 21, 2015, Pollution Emergency Alerting System Incident Report, Solutia reported that on February 19, 2015, 2,000 pounds of vinyl acetate were released from the facility, as shown in the table below.
- 24. In its Title V Permit semi-annual report, dated September 15, 2015, Solutia reported that 5,550, 1,353, 9, and 192 pounds of vinyl acetate were released from the facility, on February 23, April 20, June 23, and June 28, 2015, respectively. These releases are also shown in the table below in tons.

Vinyl Acetate Emissions from Solutia's Trenton, Michigan Facility (in Tons)

Month/Year	Monthly Process Emissions	12-Month Rolling Process Emissions	Fugitive Releases	12-Month Rolling Process and Fugitive Emissions
02/2014	0.540	5.88		5.88
03/2014	0.456	5.89		5.89
04/2014	0.485	5.78		5.78
05/2014	0.512	5.82		5.82
06/2014	0.656	6.02		6.02
07/2014	0.554	6.04		6.04
08/2014	0.648	6.26		6.26
09/2014	0.266	5.90		5.90
10/2014	0.350	5.83		5.83
11/2014	0.482	5.97		5.97
12/2014	0.569	6.06	****	6.06
01/2015	0.598	6.12		6.12
02/2015	0.578	6.15	1.00 2.78	9.93
03/2015	0.485	6.18		9.96
04/2015	0.475	6.17	0.68	10.63
05/2015	0.412	6.07		10.53
06/2015	0.679	6.09	0.005 0.096	10.66
07/2015	0.619	6.16		10.72

25. The monthly emissions data combined with the aforementioned releases for vinyl acetate result in Solutia having exceeded 9.0 tons of vinyl acetate beginning in February 2015, and 10 tons of vinyl acetate beginning in April 2015.

- 26. Since April 2015, Solutia has been a "major source" of HAPs, as that term is defined in Section 112(a)(1) of the CAA, 42 U.S.C. § 7412(a)(1), and therefore subject to the requirements of the MON.
- 27. From April 2015 to the present, Solutia has not taken action to comply with the emission standards, requirements to demonstrate initial and continuous compliance with emission limits, operating limits, work practice standards, and recordkeeping requirements of the MON.
- 28. In its Title V Permit 2015 semi-annual report, dated September 15, 2015, Solutia reported that quarterly inspections for in-HAP service equipment leaks were not carried out for eight (8) components, installed during the first quarter of 2013: four (4) valves and four (4) connectors, respectively. The first inspection for each of these components was completed during the second quarter of the 2015.

# **Violations**

- 29. Starting in February 2015 through at least July 2015, Solutia failed to limit emissions of vinyl acetate from the facility to less than 9.0 tpy, as calculated on a 12-month rolling basis, in violation of Special Condition I.1 of the Source-Wide Conditions of Solutia's Title V Permit, Section 502(a) of the CAA, 42 U.S.C. § 7661a(a), and 40 C.F.R. § 70.7(b).
- 30. Since April 2015, Solutia has failed to comply with the emission standards, requirements to demonstrate initial and continuous compliance with emission limits, operating limits, work practice standards, and recordkeeping requirements of the MON, in violation of the MON, Section 112(i)(3) of the CAA, 42 U.S.C. § 7412(i)(3), and 40 C.F.R. § 63.4.
- From January 2013 to March 2015, Solutia failed to perform quarterly monitoring for leaks for valves at the facility, as referenced in Paragraph 28, in violation of the Special Condition VI.3 of the Source-Wide Conditions of Solutia's Title V Permit, Section 502(a) of the CAA, 42 U.S.C. § 7661a(a).
- 32. From January 2013 to March 2015, Solutia failed to perform quarterly monitoring for leaks for connectors at the facility, as referenced in Paragraph 28, in violation of the Special Condition VI.3 of the Source-Wide Conditions of Solutia's Title V Permit, Section 502(a) of the CAA, 42 U.S.C. § 7661a(a).

# **Environmental Impact of Violations**

- 33. These violations have caused excess emissions of vinyl acetate. Exposure, both acute and chronic, to vinyl acetate may result in eye and upper respiratory tract irritation, cough, and/or hoarseness.
- 34. VOC emissions increase the amount of pollutants that have the ability to create photochemical smog under certain conditions.

35.	HAP emissions increase the amount of pollutants that are known or suspected to cause
	cancer or other serious health effects, such as reproductive effects or birth defects and/or
	adverse environmental effects.

Edward Nam

Acting Director
Air and Radiation Division

# **CERTIFICATE OF MAILING**

I, Loretta Shaffer, certify that I sent a Finding of Violation, EPA-5-16-MI-16, by Certified Mail, Return Receipt Requested, to:

Gary Williams Plant Manager Solutia, Inc. 5100 West Jefferson Avenue Trenton, Michigan 48183

I also certify that I sent copies of the Finding of Violation by first-class mail to:

Chris Ethridge Supervisor Michigan Department of Environmental Quality Southeast Michigan District Office 27700 Donald Court Warren, Michigan 48092-2793

Tom Hess Chief Michigan Department of Environmental Quality Air Quality Division P.O. Box 30260 Lansing, Michigan 48909

On the <u>34</u> day of <u>August</u> 2016.

Loretta Shaffer Program Technician

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AECAB, PAS

CERTIFIED MAIL RECEIPT NUMBER: 7009 1680 0000 7674 0685